

NTSB National Transportation Safety Board

Office of Aviation Safety

## Survival Factors and Airport Emergency Response



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### **Safety Issues**

- ARFF cargo aircraft familiarization
- ARFF HRET/SPN training
- Cargo emergency exit requirements



### **ARFF Cargo Familiarization**

- ARFF personnel could not open main cargo door
  - Forced lockpin handle
  - Rendered door inoperative
- No scheduled cargo aircraft familiarization training



### **ARFF Cargo Familiarization**

- Emergency Response Diagrams
- Before the accident
  - PHL ARFF only had passenger DC-8 configuration, not cargo
- After the accident
  - UPS provided PHL ARFF with DC-8 cargo Emergency Response Diagram, which was inaccurate



### **Emergency Response Diagram Inaccuracies**

- Stated that 2-inch bands indicated all externally operable exits
- Depicted deactivated exits as externally operable
- Did not mention opening vent door for main cargo door operation



## ARFF HRET/SPN Use and Training

- Thermal imaging camera was used by PHL ARFF to locate hot spots
- ARFF had trouble operating piercing device
  - Tip of piercing turret slipped and moved out of place
  - HRET/SPN training inadequate



#### **Snozzle Piercing Picture Here**



# Snozzle Discharging Agent Through Burnthough Holes Picture Here



### **UPS DC-8 Emergency Exits**

- L1 door primary means of entry and exit
- Two cockpit windows and L1 door
- Flight crew evacuated via L1 door
- L1 door not marked on exterior
- Floor level emergency exits needed





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